

NOISE INFORMATION SHEET

I-80 PROJECT OVERVIEW

The Environmental Process for the I-80 project was completed in June 2007. Construction begins August 2007 and will include the following:

- Additional general purpose lane: eastbound and westbound
- Auxiliary lane: eastbound and westbound
- Retaining walls to reduce right-of-way impacts
- Noise walls (determined by balloting results)
- New pavement
- New bridges at State Street, 300 East, 500 East, 600 East, 700 East, 900 East, and Highland Drive
- Interchange ramp improvements
- Intersection improvements

This flier contains information regarding noise walls along I-80 and UDOT's noise abatement policy.

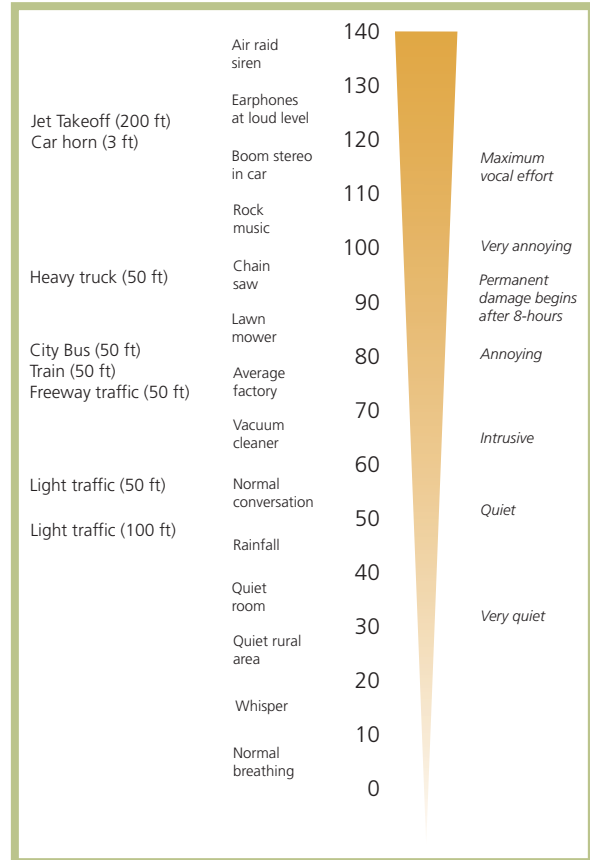
WHAT ARE NOISE LEVELS?

Traffic noise levels are measured in A-weighted decibels (dBA), which approximate the way the human ear hears sounds at different frequencies.

The A-scale emphasizes the higher frequency noise content since it is more annoying to the human ear. Since traffic noise varies over time, sound levels are expressed as "equivalent levels" or L(eq) and are representative of the average sound level. The figure above shows the noise levels of common sounds for reference.

WHAT QUALIFIES AS A NOISE IMPACT?

A noise impact occurs when a property has a noise level that meets or exceeds the value listed in the table below. For residences, parks, churches the noise level is 65 dBA and for businesses the noise level is 70 dBA. A noise impact also occurs if the predicted future noise level is 10 dBA or more above the existing level.



NOISE LEVEL VALUES

Activity Category	Leq (h), dBA	Description of Activity Category
A	55 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose
B	65 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries and hospitals
C	70 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above (Businesses)
D	--	Undeveloped lands
E	50 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums



NOISE WALLS

- For a sound wall to be effective, it must be high enough and long enough to block the view of the road. The Highway Traffic Noise Analysis and Abatement Policy and Guidance published by the U.S. Department of Transportation states that a good rule of thumb is that the noise barrier should extend four times as far in each direction as the distance from the receiver to the barrier. For instance, if the receiver is 50 feet from the proposed sound wall, the wall should extend at least 200 feet on either side of the receiver in order to be most effective. This is not always practical because of space constraints.
- The UDOT Noise Abatement Policy states that, “the maximum cost used to determine reasonableness to provide noise abatement will be \$25,000 per benefited receiver.”
- The UDOT Noise Abatement Policy also requires that sound walls achieve at least a 5 dBA reduction at the majority of front-row (adjacent) receivers.
- Where noise walls are feasible and reasonable for noise abatement, UDOT will contact the property owners of record for the purpose of balloting.
- Noise walls will be considered if 75% of the total number of front row receivers (those adjacent to the proposed noise wall) and at least 67% of the total number of all impacted, benefited receivers vote in favor for the wall. The percentages will be based on the total number of ballots sent out.
- Vegetation within the existing right-of-way will be removed as part of the construction process, and is not dependant upon the approval of the noise wall.

If the impacted property owners vote to reject construction of a noise wall, their area will not be reconsidered for noise abatement measures unless a future Type 1 transportation project occurs.

PROPOSED NOISE WALLS			
Noise Wall	Height	Length	Total Benefited Receivers (Corrected)
1	12 Feet	4,412 Feet	121
2	12 Feet	3,291 Feet	51
3	14 Feet	1,900 Feet	16
4	14 Feet	2,041 Feet	30
5	14 Feet	763 Feet	14